WHAT IS CLAIMED IS:

1. A system for monitoring a communications circuit, comprising:

at least one impedance element, wherein the at least one impedance element is configured to be connected to the communications circuit when the communications circuit is established, and wherein the at least one impedance element causes communication devices communicating via the communications circuit to adapt to a presence of the at least one impedance element;

at least one reference ground point, wherein each impedance element is configured to be switchably connected to a respective reference ground point;

at least one monitor access element, wherein each impedance element is configured to be switchably disconnected from a respective monitor access element, and wherein each monitor access element is configured to be a virtual reference ground point; and

at least one communications circuit monitor, wherein the at least one communications circuit monitor is configured to be connected to the respective monitor access element, and

wherein to monitor the communications circuit, the at least one impedance element is configured to be switchably connected to the respective monitor access element and the at least one impedance element is configured to be switchably disconnected from the respective reference ground point, thereby connecting the at least one communications circuit monitor to the communications circuit with an absence of disruption to data communication within the communications circuit.

2. The system of claim 1, wherein the at least one impedance element is configured to be switchably connected to the respective at least one reference ground point, and the at least one impedance element is configured to be switchably disconnected from the respective at least one monitor access element, thereby disconnecting the communications circuit monitor from the communications circuit with the absence of disruption to data communication within the communications circuit.

3. The system of claim 2, wherein the communications circuit monitor is configured to be disconnected from the at least one monitor access element.

4. The system of claim 1, wherein each impedance element comprises at least one of a resistance element, a capacitance element, and an inductance element.

5. The system of claim 1, wherein each monitor access element comprises an amplification element configured as an inverting amplifier.

6. The system of claim 5, wherein each monitor access element further comprises an impedance element.

7. The system of claim 6, wherein the impedance element of the monitor access element comprises at least one of a resistance element, a capacitance element, and an inductance element.

8. The system of claim 1, wherein the communications circuit comprises a xDSL circuit.

9. The system of claim 1, further comprising:

a monitor bus, wherein each monitor access element is configured to be connected to each impedance element through the monitor bus.

10. A system for monitoring a communications circuit, comprising:

a first impedance element configured to be connected to a first communications circuit line of the communications circuit when the communications circuit is established;

a second impedance element configured to be connected to a second communications circuit line of the communications circuit when the communications circuit is established, wherein the first and second impedance elements are configured to be switchably connected to form a differential impedance across the

communications circuit, and wherein the differential impedance formed by the first and second impedance elements causes communication devices communicating via the communications circuit to adapt to a presence of the differential impedance;

a monitor access element, wherein the first and second impedance elements are configured to be switchably disconnected from the monitor access element, and wherein the monitor access element is configured to be a virtual differential zero impedance; and

a communications circuit monitor, wherein the communications circuit monitor is configured to be connected to the monitor access element, and

wherein to monitor the communications circuit, the first and second impedance elements are configured to be switchably connected to the monitor access element, and the first impedance element is configured to be switchably disconnected from the second impedance element, thereby connecting the communications circuit monitor to the communications circuit with an absence of disruption to data communication within the communications circuit.

11. The system of claim 10, wherein the first impedance element is configured to be switchably connected to the second impedance element, and the first and second impedance elements are configured to be switchably disconnected from the monitor access element, thereby disconnecting the communications circuit monitor from the communications circuit with the absence of disruption to data communication within the communications circuit.

12. The system of claim 11, wherein the communications circuit monitor is configured to be disconnected from the monitor access element.

13. The system of claim 10, wherein each of the first and second impedance elements comprises at least one of a resistance element, a capacitance element, and an inductance element.

14. The system of claim 10, wherein the monitor access element comprises a differential amplification element.

15. The system of claim 14, wherein the monitor access element further comprises an impedance element.

16. The system of claim 15, wherein the impedance element of the monitor access element comprises at least one of a resistance element, a capacitance element, and an inductance element.

17. The system of claim 10, wherein the communications circuit comprises a xDSL circuit.

18. The system of claim 10, further comprising:

a monitor bus, wherein the monitor access element is configured to be connected to at least one of the first and second impedance elements through the monitor bus.

19. A method for monitoring a communications circuit, comprising the steps of:

connecting an impedance element to the communications circuit when the communications circuit is established, wherein the impedance element causes communication devices communicating via the communications circuit to adapt to a presence of the impedance element;

switchably connecting the impedance element to a reference ground point;

switchably disconnecting the impedance element from a monitor access element, wherein the monitor access element is configured to be a virtual reference ground point;

connecting a communications circuit monitor to the monitor access element;

switchably connecting the impedance element to the monitor access element;

switchably disconnecting the impedance element from the reference ground point, thereby connecting the communications circuit monitor to the communications circuit with an absence of disruption to data communication within the communications circuit; and

monitoring the communications circuit using the communications circuit monitor.

20. The method of claim 19, comprising the steps of:

switchably connecting the impedance element to the reference ground point; and

switchably disconnecting the impedance element from the monitor access element, thereby disconnecting the communications circuit monitor from the communications circuit with the absence of disruption to data communication within the communications circuit.

21. The method of claim 20, comprising the step of:

disconnecting the communications circuit monitor from the monitor access element.

22. The method of claim 19, comprising the step of:

connecting the monitor access element to the impedance element through a monitor bus.

23. A method for monitoring a communications circuit, comprising the steps of:

connecting a first impedance element to a first communications circuit line of the communications circuit and a second impedance element to a second communications circuit line of the communications circuit when the communications circuit is established;

switchably connecting the first and second impedance elements to form a differential impedance across the communications circuit, wherein the differential impedance formed by the first and second impedance elements causes communication devices communicating via the communications circuit to adapt to a presence of the differential impedance;

switchably disconnecting the first and second impedance elements from a monitor access element, wherein the monitor access element is configured to be a virtual differential zero impedance;

connecting a communications circuit monitor to the monitor access element;

switchably connecting the first and second impedance elements to the monitor access element;

switchably disconnecting the first impedance element from the second impedance element, thereby connecting the communications circuit monitor to the communications circuit with an absence of disruption to data communication within the communications circuit; and

monitoring the communications circuit using the communications circuit monitor.

24. The method of claim 23, comprising the steps of:

switchably connecting the first impedance element to the second impedance element; and

switchably disconnecting the first and second impedance elements from the monitor access element, thereby disconnecting the communications circuit monitor from the communications circuit with the absence of disruption to data communication within the communications circuit.

25. The method of claim 24, comprising the step of:

disconnecting the communications circuit monitor from the monitor access element.

26. The method of claim 23, comprising the step of:

connecting the monitor access element to at least one of the first and second impedance elements through a monitor bus.

27. A method for connecting and disconnecting a selected load to/from a communications circuit, comprising the steps of:

connecting the selected load to the communications circuit with an absence of disruption to data communication within the communications circuit, by substituting the selected load for an equivalent load,

wherein the equivalent load is configured to be connected to the communications circuit at the time the communications circuit is established, and

wherein the equivalent load causes communication devices communicating via the communications circuit to adapt to a presence of the equivalent load; and

disconnecting the selected load from the communications circuit with the absence of disruption to data communication within the communications circuit, by substituting the equivalent load for the selected load.

28. The method of claim 27, wherein the selected load comprises a monitor access element and the equivalent load comprises an impedance element, and wherein the step of connecting comprises the steps of:

connecting the impedance element to the communications circuit when the communications circuit is established, wherein the impedance element causes communication devices communicating via the communications circuit to adapt to the presence of the impedance element, and wherein the impedance element is configured to be switchably connected to a reference ground point;

connecting the monitor access element to the communications circuit, wherein the monitor access element is configured to be a virtual reference ground point; and

substituting the virtual reference ground point of the monitor access element for the reference ground point of the impedance element by switchably connecting the monitor access element to the impedance element and switchably disconnecting the reference ground point from the impedance element, wherein the monitor access element is connected to the communications circuit with the absence of disruption to data communication within the communications circuit.

29. The method of claim 28, wherein the step of disconnecting comprises the steps of:

disconnecting the monitor access element from the communications circuit; and

substituting the reference ground point of the impedance element for the virtual reference ground point of the monitor access element by switchably connecting the reference ground point to the impedance element and switchably disconnecting the monitor access element from the impedance element, wherein the monitor access element is disconnected from the communications circuit with the absence of disruption to data communication within the communications circuit.

30. The method of claim 27, wherein the selected load comprises a monitor access element and the equivalent load comprises a first and a second impedance element, and wherein the step of connecting comprises the steps of:

connecting the first and the second impedance elements to the communications circuit when the communications circuit is established, wherein the first and second impedance elements are configured to be switchably connected across the communications circuit, and wherein a differential impedance formed by the first and second impedance elements causes communication devices communicating via the communications circuit to adapt to the presence of the differential impedance;

connecting the monitor access element to the communications circuit, wherein the monitor access element is configured to be a virtual differential zero impedance; and

substituting the virtual differential zero impedance of the monitor access element for a differential zero impedance between the first and second impedance elements by switchably connecting the monitor access element to each of the first and second impedance elements and switchably disconnecting the first impedance element from the second impedance element, wherein the monitor access element is connected to the communications circuit with the absence of disruption to data communication within the communications circuit.

31. The method of claim 30, wherein the step of disconnecting comprises the steps of:

disconnecting the monitor access element from the communications circuit; and

substituting the differential zero impedance between the first and second impedance elements for the virtual differential zero impedance of the monitor access element by switchably connecting the first impedance element to the second impedance element and switchably disconnecting the monitor access element from each of the first and second impedance elements, wherein the monitor access element is disconnected from the communications circuit with the absence of disruption to data communication within the communications circuit.